

FEASIBILITY STUDY REQUIREMENTS FOR INFORMATION TECHNOLOGY INVESTMENTS

Introduction

The goals of the Feasibility Study Requirements are to:

- Streamline the creation of the feasibility study in order to add value to the decision-making process based on the results of agency planning and design efforts.
- Recognize the role of the feasibility study in supporting resource requests for proposed information technology (IT) investments.
- Introduce the concept of time value of money by incorporating Net Present Value, Internal Rate of Return, and Breakeven Analysis financial measures in the suggested format of the Cost/Benefit Analysis.
- Provide formats for clear and concise cost and benefit rationale to assist in the investment evaluation process.

Requirements

Agency management must make a crucial decision during the early stages of an information technology (IT) investment: whether to seek resources to support full-scale development and implementation, or to suspend activities due to a lack of clear benefits (tangible, intangible, or both), and/or unacceptable risks. The feasibility study is a structured, modular process to gather the information needed to support stakeholders in making this crucial decision and to support decision packages submitted to the Office of Financial Management (OFM).

An agency will prepare the feasibility study when sufficient functional and technical designs have been completed to articulate the major objectives of an IT investment and define the work necessary to achieve those objectives with a high degree of confidence. This means an agency has completed a Project Definition, a Requirements Analysis, and a General Design. As a result of this work, the agency has far more information in hand about the expected costs, benefits, and risks of a proposed project than it did when preparing the Project Definition. It is critical this new information be applied to a "go/no go" decision before committing significant funds to an investment.

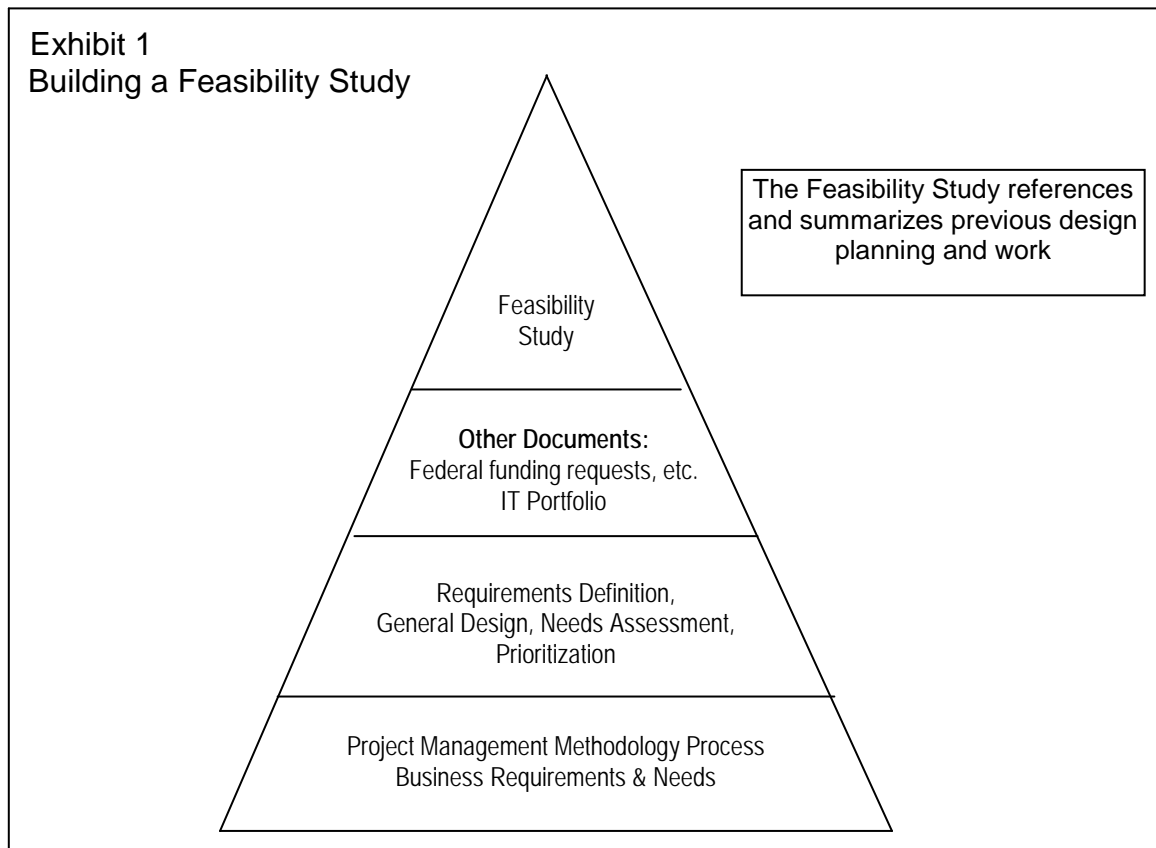
Components of the Feasibility Study

The feasibility study builds on analyses and information already collected by the agency during the initial stages of a project (see Exhibit 1). As noted earlier, the agency should have already completed a Project Definition, a Requirements Analysis, and a General Design. The feasibility study summarizes the findings of these project phases in a way that supports sound decision making. In particular, the feasibility study replicates the structure of the Project Definition and adds a minimal number of new sections. The intention is that where a Project Definition has already been prepared, it will be updated and expanded where necessary. Much of the supporting detail will be included by reference to other attached documents.

For projects involving non-state, funding sources (e.g. federal grants, federal financial participation, other grant funds), it is acceptable to use the documents required by the various funding sources as the basis for the information needed in the feasibility study. The agency should provide the OCIO the other documents, as well as a crosswalk between the feasibility study content requirements and the funding request, to ensure the information

requirements of the feasibility study are met. For example: a federal Implementation Advance Planning Document (IAPD) may be used to provide information required in the feasibility study.

The individual items in each component are intended to provide guidance as to the type of information required. Agencies need not address items that are not applicable to the proposed investment.



1. Executive Summary

Provide a brief summary of the business objectives, approach, expected costs, benefits, and risks of the proposed investment.

2. Background and Needs Assessment:

Discuss the reasons for the proposal, such as:

- Business environment
- Business need(s)
- Business opportunities
- Business service goals
- Statutory requirements
- Other

3. Objectives (as applicable)

Discuss the primary objectives of the investment, such as:

- Problems to be solved / Opportunities to be gained
- Service delivery enhancements
- Response to statutory requirements
- Other

4. Impacts (as applicable)

Identify the entities which will be impacted by the proposed investment, such as:

- Inter-agency
- Intra-agency
- Program(s)
- Subprogram(s)
- Customers of agency activities (e.g., clients, constituencies, taxpayers, etc.)
- Other

5. Organizational Effects (as applicable)

Discuss how implementation of the investment may affect the agency's organization, such as:

- Impact on work processes
- Training needs
- Job content
- Impact on organizational structure
- Other

6. Proposed Solution

Describe the proposed solution that will meet the objectives outlined above. Present the solution in terms of:

- Specific work products
- Technical tools used to support the solution
- Major functions to be provided
- New organizational structures and processes necessary to support implementation.

7. Major Alternatives Considered

Present the major alternatives considered and compare these with the proposed solution. Note that the current state can be considered one alternative. Describe why the alternatives not chosen were rejected.

8. Conformity with Agency IT Portfolio

Discuss how the proposed project supports the agency IT Portfolio.

- Strategic focus (business and IT goals)
- Effect on technology infrastructure
- Other

9. Project Management and Organization (including external resources)

Describe the project management approach.

- Roles and responsibilities
- Decision-making process
- Management qualifications
- Project team organization
- Quality assurance strategies

10. Estimated Timeframe and Work Plan

Provide an estimated timeframe, by project phase, for the proposed investment through implementation. Identify major tasks and resources required for each project phase, including external and internal staff resources. Identify key milestones and decision points.

11. Cost Benefit Analysis (CBA)

Forms 1-5 are a suggested approach to the cost and benefit analysis (see <http://www.ofm.wa.gov/ocio/policies/documents/203r.xls>). They provide a structured, calculated method for delivering data in a usable format. In addition to Total Outflow, Total Inflow, Net Cash Flow, and Net Present Value, the cost and benefit analysis must be detailed for each viable option, for each fiscal year. The cost benefit analysis needs to include internal as well as external resources, as appropriate.

- Provide the completed CBA forms in this section.

Incremental Costs:

Incremental costs are the difference between costs of current methods of operation and cost of implementing and operating new methods. Summarize the investment's incremental costs and provide the detail using the CBA forms. Provide both development and operations cost estimates as appropriate. Costs should be presented for at least five years of operation after implementation or until breakeven and/or pay back is achieved.

The estimates of costs are expected to be stated with a very high degree of confidence. As a result, costs should be presented as single point, not-to-exceed limits. Future dollars should reflect the best estimate of what the cost levels will actually be in the future periods. Net Present Value (effect of the projected costs and benefits stated in today's dollars), Internal Rate of Return, and breakeven period calculations will be derived from the projected future expenditures.

Note: Net Present Value is incorporated for financial decision-making purposes only and should not be used to define funding levels in future years of a project.

Provide rationale for the cost estimates and reference documents containing the detailed estimates and work breakdown structures. As appropriate, reference the costs incurred by similar investments in other states, comparative projects in Washington, etc.

Benefits

Summarize the investment's expected quantitative tangible and intangible benefits and provide the detail using the CBA forms. Future estimates should reflect the benefit levels actually expected in the future periods. Net Present Value (effect of the projected costs and benefits stated in today's dollars), Internal Rate of Return, and break-even period calculations will be derived from these amounts. Provide justification rationale for the benefit estimates. Describe how a baseline and measurements will be established to confirm each benefit. Also provide a narrative of the intangible benefits associated with the project.

12. Risk Management

Assess the risk of the investment using the Portfolio-based Severity and Risk matrix located in the Managing IT Portfolios Standards. Risk criteria rank investments on four dimensions - organizational impact, development effort, technology, and organizational capability. Similarly, severity criteria rank investments on the four dimensions of impact on citizens, visibility to the public and Legislature, impact on state operations, and the consequences of doing nothing.

- Present the expected areas of medium or high risk to this investment and describe how these risks will be managed.

Indicate whether the project will use external quality assurance and/or internal agency quality assurance.